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SLOVENSKI STANDARD
SIST EN 60958:1999/A2:1999

01-april-1999

Digital audio interface (IEC 60958/A2:1995)

Digital audio interface

Digitalton-Schnittstelle

Interface audionumérique

Ta slovenski standard je istoveten z: **EN 60958:1990/A2:1995**

<u>**ICS:**</u>

33.160.30	Avdio sistemi	Audio systems
35.200	Vmesniška in povezovalna oprema	Interface and interconnection equipment

SIST EN 60958:1999/A2:1999   **en**

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60958/A2

December 1995

UDC 621.396.97:534.86:621.397.037.37
ICS 17.140.50

Descriptors: Sound recording, digital signal, equipment interconnection, interface, format, structure, characteristic, requirement

English version

Digital audio interface
(IEC 958:1989/A2:1995)

Interface audionumérique
(CEI 958:1989/A2:1995)

Digitalton-Schnittstelle
(IEC 958:1989/A2:1995)

This amendment A2 modifies the European Standard EN 60958:1990; it was approved by CENELEC on 1995-09-20. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 60958:1990/A2:1995 E

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EN 60958:1990/A2:1995

Foreword

The text of document 84/398/DIS, future amendment 2 to IEC 958:1989, prepared by IEC TC 84, Equipment and systems in the field of audio, video and audiovisual engineering, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60958:1990 on 1995-09-20.

The following dates were fixed:

- latest date by which the amendment has to be implemented
  at national level by publication of an identical
  national standard or by endorsement   (dop) 1996-08-01

- latest date by which the national standards conflicting
  with the amendment have to be withdrawn   (dow) 1996-08-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annexes M and N are normative.

Endorsement notice

The text of amendment 2:1995 to the International Standard IEC 958:1989 was approved by CENELEC as an amendment to the European Standard without any modification.

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
IEC
958

1989

AMENDEMENT 2
AMENDMENT 2

1995-11

Amendement 2

Interface audionumérique

Amendment 2

Digital audio interface

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE **L**

Pour prix, voir catalogue en vigueur
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FOREWORD

This amendment has been prepared by IEC technical committee 84: Equipment and systems in the field of audio, video and audiovisual engineering.

The text of this amendment is based on the following documents:

DIS	Report on voting
84/398/DIS	84/426/RVD

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

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ANNEX C
(normative)

Replace the title of annex C by the following:

APPLICATION OF THE CONSUMER DIGITAL AUDIO INTERFACE IN THE TWO-CHANNEL DIGITAL AUDIO TAPE RECORDER (DAT)

Add, after the paragraph on category code 11000000, the following:

Channel status

CATEGORY CODE = 1100000L

– Channel status: this is according to 4.2.2.2: Channel status data format (Mode 0) for digital audio equipment for consumer use.

The following applies:

– Bits 0 to 5 according to 4.2.2.1.

– Bits 6 and 7 shall be 0 0

– Category code = 1 1 0 0 0 0 0 L

– Bits 16 to 191 according to 4.2.2.2.

– Audio sample = 16 bits/sample.

– Audio auxiliary = "0"

– U-channel = SUB-CODE (see figures C.1 and C.2).

– The bits in "CONTROL" and "F_s" should be copied from the source.

User data

When CATEGORY CODE = 1100000L, SYNC, Start-ID and Shortening-ID are in the user data.

The SYNC bit is carried in the sub-frame of the first sampling word (L_0), the Start-ID bit in the sub-frame of the second sampling word (R_0) and the Shortening-ID bit in the sub-frame of the third sampling word (L_1), of one DAT frame. Other bits are logical zero '0'. When the DAT player replays normally, Start-ID and Shortening-ID should be transmitted whenever it detects them, that is, Start-ID: 300 ± 30 frames and Shortening-ID: 33 ± 3 frames.

When the player shortens playback, Shortening-ID should be transmitted once for the first frame.

Audio sample word/DAT frame

F_s = 48 kHz: $L_0 R_0 L_1 R_1$ L_2 ...... L_{1439} R_{1439} 2 880 words

F_s = 44,1 kHz: $L_0 R_0 L_1 R_1$ L_2 ...... L_{1322} R_{1322} 2 646 words

F_s = 32 kHz: $L_0 R_0 L_1 R_1$ L_2 ...... L_{959} R_{959} 1 920 words
                                                                (32K, 32K 4-channel mode)

F_s = 32 kHz: $L_0 R_0 L_1 R_1$ L_2 ...... L_{1919} R_{1919} 3 840 words
                                                                (32K LP mode)

(Tape speed = 4,075 mm/s).

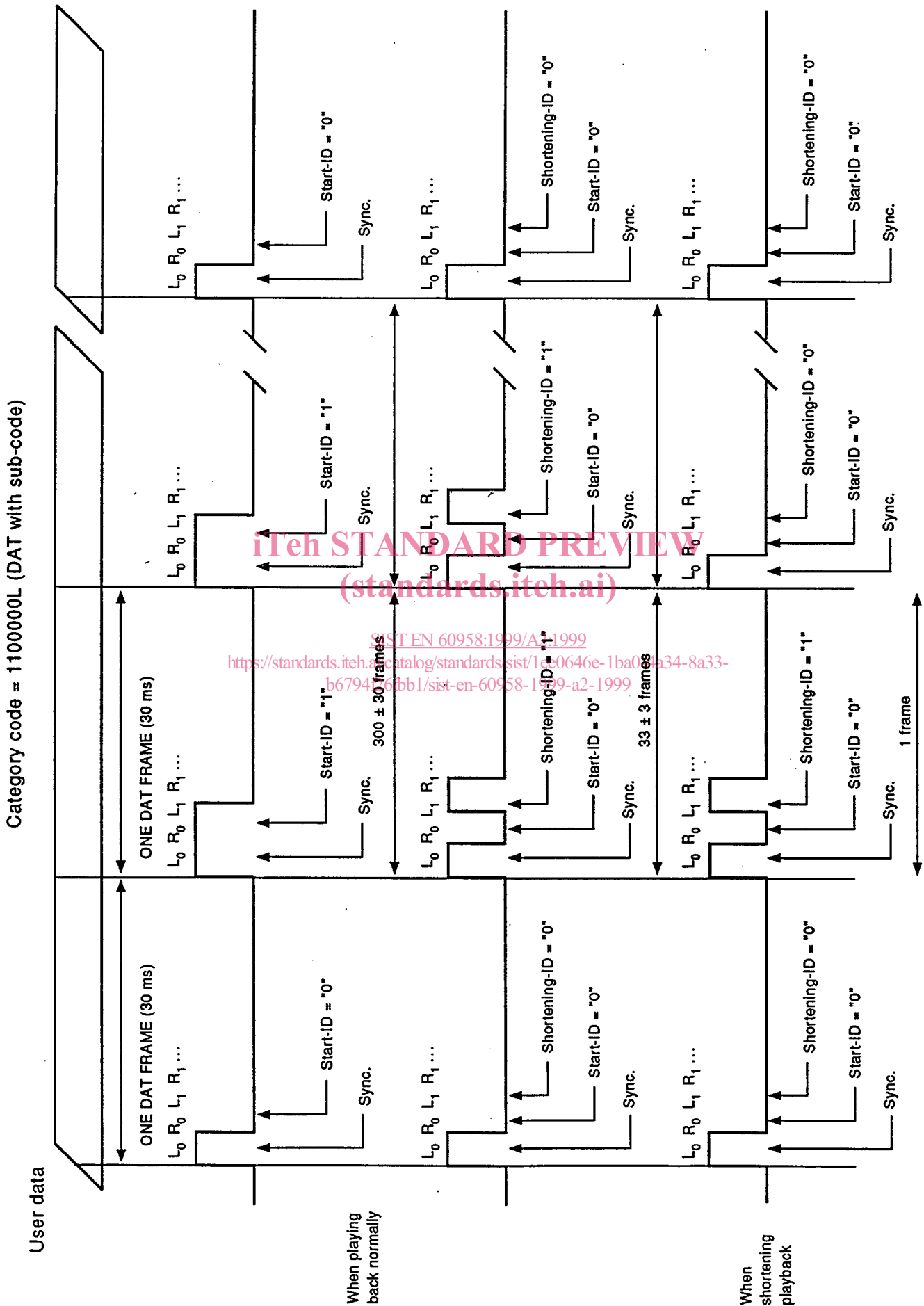| Word	User data
L_0	Sync.
R_0	S-ID
L_1	Sh-ID
R_1	0
L_2	0
R_2	0
·	·
·	·
·	·
·	·
·	·
L_0	Sync.
R_0	S-ID
L_1	Sh-ID
R_1	0

Figure C.1

Figure C.2

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Add, after annex L, the following new annexes M and N:

Annex M
(normative)

Application of the digital audio interface in the digital compact cassette system (consumer mode)

CATEGORY CODE = 1100001L

Sample word: this contains 2's complement samples with MSB at position 27.

Auxiliary sample bits: these shall not be used, and shall be "0".

Channel status: this is according to 4.2.2.2: Channel status data format (Mode 0) for digital audio equipment for consumer use.

The following applies:

- Bits 0 to 5 according to 4.2.2.1.
- Bits 6 and 7 shall be "0" "0".
- Category code = 1 1 0 0 0 0 1 L.
- Bits 16 to 191 according to 4.2.2.2.

User data: two modes are available, marker mode and extended mode.

Both use the same definition of messages. Marker mode is mandatory, extended mode is optional.

A message consists of one or more information units (IU). An information unit contains 8 bits. The first bit is always a logical "1", and is called the IU start bit. The remaining 7 bits contain information. Information units that belong to the same message are separated by up to 8 logical "0" bits. Different messages are separated by more than 8 logical "0" bits.

Marker mode:

This mode allows just one message in which the most important information is carried. This message consists of one information unit, which is shown below:

1	0	LAB	SH	FAD	MUT	STP	SCM
Start bit	Mode bit						